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REPORT

to the

MONTANA LIVESTOCK SANITARY BOARD

December 1, 1944 to November 30, 1945

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REPORT

to the

MONTANA LIVESTOCK SANITARY BOARD

December 1, 1944 to November 30, 1945

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MONTANA LIVESTOCK SANITARY BOARD

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Clifford J. McNamara, Big Sandy

M. H. Tschirgi, Wyola

Walter Kropp, Malta

******

W. J. Butler

Secretary and Executive Officer
State Veterinary Surgeon
Director of Laboratories

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Helena, Montana
December 1, 1945

Honorable Sam C. Ford
Governor of Montana
Helena, Montana

Sir:

In compliance with Section 3292 Political Codes of Montana 1935, we transmit herewith the report of the State Veterinary Surgeon to the Montana Livestock Sanitary Board for the year December 1, 1944 to November 30, 1945.

Respectfully submitted,

MONTANA LIVESTOCK SANITARY BOARD

W. J. Butler

W. J. Butler, Executive Officer

Vol. 1 Number 1

REPORT OF

MONTANA LIVESTOCK SANITARY BOARD

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Helena, Montana
December 1, 1945

Honorable Livestock Sanitary Board
Helena, Montana

Sirs:

In compliance with Section 329 Political Codes of Montana 1935 we submit the report of the State Veterinary Surgeon and Executive Officer of the Montana Livestock Sanitary Board for the year December 1, 1944 to November 30, 1945.

There were four calls issued for meetings of the Livestock Sanitary Board during the year 1945.

The first meeting was held at the Finlen Hotel at Butte on January 12, 1945.

The second meeting was held at Helena on January 29, 1945.

The third meeting was the annual meeting and was held at Helena on April 10, 1945, the second Tuesday in April.

The fourth meeting was held at Helena on Monday, September 24, 1945.

At these various meetings matters of importance and interest to the livestock industry were discussed at length and acted upon.

All actions, regulations and orders promulgated by the Executive Officer were approved.

The complete minutes of all meetings are on file in the office of the Secretary in the Livestock Building at Helena, Montana.

FOREWORD

Again we have had an exceptionally good year for the livestock industry. In practically all sections there has been an abundance of water and grass. Prices have been well above the average. All in all, Montana has been a livestock paradise during the past year.

Our cattle population has increased. Our sheep population has decreased. Our sheep population is estimated at slightly over three million while three years ago it was slightly over four million. It is estimated that we have in the neighborhood of two million cattle.

These figures do not include the spring and summer calf and lamb crops.

Taking the State as a whole livestock have been remarkably free from disease. Neither cattle, sheep nor horse scab exists in the State.

Glanders and Dourine in horses have been completely eradicated.

Tuberculosis in cattle has been reduced to a minimum. Brucellosis (Bang's disease) still offers a very serious problem in raw milk dairy herds. It is no longer considered a serious problem in beef herds where proper herd management and vaccination of replacement heifer calves is practiced. In dairies where pasteurization is practiced we believe that public health can be protected without serious loss to the dairy man by calfhood and adult vaccination.

If diseases of a few years ago were all that we had to take into consideration there would be very little to worry about. Unfortunately we have to worry about new diseases. There are several diseases that are gaining a strong foothold in the livestock population of the United States. At this time we refer particularly to red-water (bacillary icterohemoglobinuria) and anaplasmosis.

Bacteria never sleep and they never quit working. Their hours are 24 hours a day for 365 days a year. Man's fight against disease is eternal. As we have stated in the past, it is a question of the survival of the fittest. If you let up on disease then disease will conquer. If we sit idly by and simply think of the diseases that have been eradicated and controlled, then we will be swamped and overcome by new disease conditions. Adequate veterinary service is as essential for the prosperity of the livestock industry as are good grass and water.

FINANCES

We are deeply appreciative of the added financial assistance that the 1945 legislative assembly gave to this Department. We are indeed sorry that this assistance could not have been granted several years earlier. If we had had the financial assistance ten years ago that we have at this time I think we may safely say that we could have saved the livestock industry and the State of Montana considerable loss. We also would have been able to build up a stronger organization and given more adequate veterinary service.

Unfortunately at the present time we are not able to attract many well-qualified veterinarians. Our salary price level is not in step with the increased cost of living and the income that may be earned in private practice or in government service.

In government service the law provides eight hours a day and five days a week. Any time over these hours is considered overtime and paid on an overtime basis. Federal salaries also have been increased so that at this time most federal veterinarians receive a greater amount in salary than do our salaried field veterinarians and are only required to work eight hours a day for five days a week. State men are on duty twenty-four hours a day for seven days a week and they do not receive overtime no matter how many hours they may work. Naturally they do not work twenty-four hours a day for seven days a week, however, they are on duty and subject to call at any time. Disease is not a respecter of time or place. It makes its

appearance whenever it gets the slightest opportunity to enter the animal body. Efficient veterinary service requires immediate attention to serious or transmissible disease conditions.

We are indeed hopeful that with the practice arrangement we have in Montana that we will be able to attract well-qualified veterinarians.

VETERINARY RESEARCH LABORATORY

Veterinary research must receive the support of the livestock industry and the State legislature if the livestock industry is to continue in a prosperous condition. As yet there is no adequate known field method for diagnosing and controlling bacillary icterohemoglobinuria, anaplasmosis and several other diseases. We know that quarantine measures alone will not entirely control these diseases. Research must develop a new understanding of several diseases and ascertain definite methods for their control and eradication if the livestock industry is to continue to prosper.

We strongly recommend to the State legislative assembly and the livestock industry that adequate and consistent support be given to the Montana Veterinary Research Laboratory.

LITIGATION

Unfortunately wartime restrictions always disrupt ordinary peaceful commercial activities. We have had several violations of existing regulations that necessitated our taking the matter into court. Most of these violations were due to adulteration of milk and the non-observance of regulations governing the production and distribution of fluid milk and cream.

HORSES

GLANDERS AND DOURINE

There were no cases of glanders or dourine found in horses in the State of Montana during 1945.

DISTEMPER

We had more cases of distemper or influenza in horses in 1945 than we had in 1944, however, we had no serious outbreak. Vaccination with an autogenous vaccine and treatment with sulfa drugs proved quite effective.

ENCEPHALOMYELITIS

We are very thankful to report that there were only eleven cases of equine encephalomyelitis in Montana reported during 1945. This is a very dangerous disease and takes the lives of many horses when it occurs in epizootic form. It also may be transmitted to the human family. Quite recently it has been determined by Carl Meyers and others that poultry and wild bird life are undoubtedly the reservoir of the virus that causes this disease.

INFECTIOUS ANEMIA

We still are called upon from time to time to investigate reports of infectious anemia. It still is found in two or three districts in Montana but apparently is not now existent in horses in areas where it previously existed.

Through laboratory methods we are now in a better position to make a diagnosis of this condition and to differentiate between infectious anemia and worm infestation such as sclerostomiasis.

Unfortunately, however, there is no known adequate cure. Animals which acquire the disease and recover in most instances become carriers and spreaders of infectious anemia.

CATTLE

The entire State of Montana remains a modified accredited tuberculosis-free area and is certified as such by the United States Department of Agriculture.

TUBERCULOSIS

In 1945 we had 14 reactors to the tuberculin test for tuberculosis. Six of these were in a herd in which an imported bull was found to have a generalized case of tuberculosis. The other eight reactors were disclosed in six herds. These eight reactors proved to be no-lesion cases or skin lesion cases, and therefore are not considered to be bovine tuberculosis.

It is well known and recognized that we will occasionally find reactors to the tuberculin test that are not actually infected with the tubercle bacilli. It is possible for an animal to become sensitized to tuberculin by reason of several acid-fast organisms when as a matter of fact these organisms are not the tubercle bacilli.

The Livestock Sanitary Board and the United States Department of Agriculture have reason to be proud of their record in controlling bovine tuberculosis.

In 1943 we had 3 cases of bovine tuberculosis in cattle in Montana. In 1944 we had nine cases. In 1945 we had six cases if we do not consider the no-lesion cases. A few years ago it was not uncommon to locate between 500 and 1000 cases a year.

Bovine tuberculosis in Montana is not eradicated even though it may be very well controlled. It would not take long for this probably most insidious of all diseases to again become a major disease-control problem if we were to lessen our activities for its control.

Existing regulations require the annual testing for tuberculosis of all dairy cattle supplying fluid milk for consumption as such. This is a worthwhile requirement and should be continued until the disease is completely eradicated.

Post mortem reports from abattoirs where meat inspection is maintained should be furnished livestock disease-control officials whenever a case of tuberculosis or for that matter when any other transmissible disease is disclosed on post mortem examination.

In locating new foci of infection and in an effort to control and eradicate tuberculosis in 1945, we tuberculin tested 22,684 cattle.

JOHNE'S DISEASE

No cases of Johne's disease in cattle were reported either during 1944 or 1945.

SCABIES

Neither Psoroptic mange nor Sarcoptic mange exists in cattle in Montana.

ANTHRAX

There were no cases of anthrax reported in Montana during the year 1945.

In order to prevent a recurrence of the disease we vaccinated 1,089 animals against anthrax in areas where the disease existed in 1944.

ANAPLASMOSIS

There was one case of anaplasmosis diagnosed in Montana in 1945. This was found in an imported Brahma bull that was imported for exhibition (rodeo) purposes. So far as our investigations have determined there was no spread of the disease.

Many follow-up investigations were made in herds where anaplasmosis existed last year. We failed to find anaplasmosis in any of these herds during 1945.

It is too much to hope that control measures that were instituted for the control of the disease last year have entirely eradicated the condition in the herds where the disease did exist.

Anaplasmosis has the unhappy faculty of apparently disappearing only to flare up in succeeding years. Continued vigilance and control measures will have to be provided to safeguard against this disease.

BACILLARY ICTEROHEMOGLOBINURIA

In 1945 we vaccinated 6,184 cattle for bacillary icterohemoglobinuria.

This is one of the diseases that we will have to contend with in the future. It is caused by a spore-forming anaerobe, that is, an organism that can protect itself with a very resistant cover and lives without oxygen. When once a spore-forming anaerobe gets into a country it is there to stay, if not indefinitely, then for a long, long time.

As we have previously stated known control methods will not adequately prevent the spread of this disease.

Unfortunately many animals are carriers of the disease. They themselves may carry the organism in their bodies for an indefinite period of time and then by reason of some as yet unknown activator the organism may become activated and cause an animal to become acutely infected with the disease and die if not given prompt serum treatment. Apparently there also are immune carriers, that is, animals that have recovered from the disease, but which may void the organism. It is a baffling disease and intense research is being conducted by the Montana Livestock Sanitary Board and the Veterinary Research Laboratory. There is a vaccine that protects against this disease but unfortunately the protection is of short duration. There is a serum for the treatment of animals acutely affected with the disease that is remarkably effective and will save the animal's life in practically every instance if given shortly after the onset of clinical symptoms of the disease.

This disease was first observed in Montana on December 21, 1939. Undoubtedly the disease was imported into the State by one or more of these so-called immune carriers.

In an endeavor to control the disease and prevent its spread areas in which the disease is found are quarantined and all cattle within that area are required to be vaccinated. Herds are held in quarantine for thirty days following vaccination and for thirty days following the death of any animal in the herd from bacillary i terohemoglobinuria. Through these control measures the disease has been fairly well confined to the original focus of infection. There has been some slight spread. In a disease caused by a spore-forming anaerobe there are many ways by which the infection may be carried. The disease so far is located only in three areas and these are all west of the Rocky Mountains. The disease is not known to exist in Montana east of the Rocky Mountains. It would appear that this condition becomes activated only in wet mountainous areas where flukes are prevalent. Whether or not the fluke is the activating agent we do not know but studies are being conducted in an endeavor to determine the agent that activates the organism that causes bacillary icterohemoglobinuria or red-water.

It is not an exaggeration to state that if control measures were not provided and if vaccination was not practiced and the disease was allowed to go unrestricted that within a very short time the annual loss from this disease alone would be greater than the entire amount of money spent each year by the Montana Livestock Sanitary Board for all work within the State of Montana.

Dr. Charles P. Haynes has performed much of the field work in the control of bacillary icterohemoglobinuria. He has vaccinated the majority of the cattle vaccinated and investigated and checked most of the cases that have occurred. This work has entailed long hours and hard work in good weather and in bad weather. He has rendered a very commendable veterinary service.

Dr. Arthur M. Jasmin who was employed by the Montana Livestock Sanitary Board to do research work on bacillary icterohemoglobinuria is now jointly employed by the Livestock Sanitary Board and the Veterinary Research Laboratory. He has unraveled some of the secrets of this disease that will aid field work in its control. His research gives promise of perfecting a more potent vaccine. He has rendered a valuable scientific service.

LEPTOSPIROSIS

There were no cases of leptospirosis reported in cattle during the year 1945.

MALIGNANT CATARRH

There were two cases of malignant catarrh reported in cattle in Montana in 1945.

PULMONARY EMPHYSEMA
(Asthma)

Apparently this very peculiar phenomenon is increasing each year. All of the tests made so far by this Department and by the Veterinary Research Laboratory indicate that it is not of an infectious, contagious nature. The condition may be due to a virus but investigations and research work so far indicate that the condition is due to a body sensitization.

Apparently a similar condition exists in the human family and is called spontaneous pneumothorax. It appears that the residual air in the lungs cannot be expelled with the result that the air pressure builds up and unless relieved a rupture of the cell tissue or what is commonly called a blow-out occurs. It is our understanding that in a human case the pressure is relieved by tapping the thorax on the pressure side with a sterile needle.

PODODERMATITIS

This condition apparently is increasing. We are of the opinion it is caused by a specific virus although so far no one has isolated a virus from cattle affected with this so-called foul-foot.

As we have advised you in previous reports the disease seldom if ever is fatal. However, if it occurs in bulls it does very seriously interfere with breeding operations.

URINARY CALCULI

This is another condition that is increasing each year. This is no indication whatsoever that the formation of urinary calculi in animals is due to a specific bacterial or virus infection.

Undoubtedly a metabolic disturbance is responsible. Unfortunately however, it may be rather difficult to determine what causes this metabolic disturbance although at this time many authorities are of the opinion that a lack of vitamin A may be a contributing factor.

The study of the formation of urinary calculi has been made a major project at the Veterinary Research Laboratory and we trust that within a reasonable period of time research will have determined the exact cause of this condition and outline a treatment for its prevention and elimination.

PINK EYE

Recently Dr. E. M. Baldwin, who formerly was connected with the Livestock Sanitary Board has determined that the Hemophilus bovis is largely responsible for infectious keratitis and pink eye in cattle.

Dr. Hadleigh Marsh of the Veterinary Research Laboratory has made up a vaccine from this organism and at the present time a controlled experiment is being carried out to determine the effectiveness of this vaccine. It indeed will be a well worth find it a potent reliable vaccine may be produced for the prevention of pink eye and infectious keratitis.

VARIOUS DISEASES

There were isolated cases of coccidiosis, malignant edema, blackleg and a number of minor disease conditions reported in cattle in 1945. However, there were no serious outbreaks of a dangerous disease and there were no cases of screw-worm infestation reported in Montana in 1945.

SHEEP

SCABIES

Sheep scabies does not exist in the State of Montana and has not existed in our native sheep for the past twenty-nine years.

FOOT-ROT

Foot-rot was found in four groups of sheep during 1945. One group consisted of 35 sheep, one of 454 sheep and the other two groups contained several bands each.

Rigid control measures were instituted and we are of the opinion that the disease has been completely eradicated in one band and probably eradicated in the other three bands. Foot-rot is a difficult disease to eradicate. It requires constant and everlasting work in examining the various bands where the disease previously has occurred. We are quite certain that the disease does not carry over in the soil for any considerable period of time. Dr. Hadleigh Marsh's work at the Veterinary Research Laboratory indicates that soil contamination probably lasts for only six weeks at the most. The disease usually is acquired by the introduction of an infected animal into a band of sheep. This infected animal may infect the soil and naturally if the area is damp and muddy, healthy sheep may pick up the infection from the soil but as we have stated, that soil apparently does not remain infected for a long period of time.

It is a dangerous practice for any sheep grower to pick up or to permit a stray sheep to enter his band.

Control measures require the examination of all four feet of every sheep in the band. In many instances it requires the paring with a knife of all four feet and then the treating of all four feet of each sheep with a saturated solution of bluestone.

There is no short cut to cleaning up or eradicating foot-rot. As we have stated it requires constant reinspection of all four feet of each sheep in the band.

In controlling the disease in these two larger groups we made 25,050 individual foot examinations. This includes two or more reinspections of the same animal. In all with the aid of the owner and his workers we pared 25,050 feet or 200,400 toes.

INTESTINAL PARASITES

During 1945 there were very few cases of diarrhea from intestinal parasites reported in sheep. I think we are safe in stating that there was less trouble from intestinal parasites in sheep this year than any year for the past ten years.

We are still of the opinion that the roundworm known as the Trichostrongylus is responsible for some of our lamb losses in eastern Montana, although we know that the tapeworm (Monezia expensa) also causes trouble in our lambs.

Where the Trichostrongylus is the causative agent, we recommend the feeding of phenothiazine in salt in the proportion of one of phenothiazine to

nine of salt, to ewes beginning a month before they start lambing.

Where the Monezia expansa is the infesting parasite we recommend that the infested sheep be treated with copper sulphate and nicotine. Phenothiazine is not as effective for the removal of tapeworms as it is for the removal of roundworms.

NODULAR WORMS

Oesophagostomum columbianum has never been reported or observed in sheep in Montana.

VARIOUS DISEASES

Various minor diseases were found in sheep during 1945 but nothing that was of a serious nature.

SWINE

HOG CHOLERA

During the year 1945 hog cholera was found on 10 premises as compared with 25 premises in 1944.

ERYSIPELAS

In 1945 we diagnosed 79 cases of erysipelas. These were located on 24 premises. This disease apparently is increasing slowly but surely.

Swine erysipelas serum gives relief but it is doubtful if the disease can be eradicated by serum treatment alone. Montana does permit the use of living virus along with serum for the control of the disease on special permit. Before a special permit will be issued we must have knowledge that the disease has existed or does exist in hogs on the premise where the virus is to be used. An additional requirement is that the virus must be used by an approved graduate veterinarian.

VARIOUS DISEASES

Worm infestation and various diseases were found in swine in 1945 but none of these conditions were of a serious nature.

WILD ANIMALS, GAME BIRDS AND FISH

During the year 1945 as in past years a number of investigations and laboratory examinations were made on wild animals, game birds and fish for the State Fish & Game Commission.

DOGS

RABIES

Rabies or hydrophobia does not exist in Montana and has not been reported in the State since 1925.

POULTRY

The 1945 legislative assembly provided for the creation of the Montana Poultry Improvement Board. This Act was in conformity with the recommendation of the Montana Livestock Sanitary Board in their 1944 report. The Act provided that disease-control measures would be conducted by the Montana Livestock Sanitary Board. The legislature appropriated $16,000 for the biennium to the Montana Livestock Sanitary Board for poultry disease-control work.

Arrangements are being made for the employment of a veterinarian to act as poultry specialist and to supervise pullorum testing and other control measures as provided for by law and to work in conjunction with the Montana Poultry Improvement Board.

DAIRY INSPECTION

The inspection of dairies and the follow-up measures that this work entails along with the testing and examination of dairy cattle is a major work. A number of our field veterinarians are required to give the major portion of their services in supervising the production and distribution of fluid milk so that the milk-drinking public may be protected. This work has been particularly difficult during the war period. Many of the regulations promulgated by federal agencies and particularly by the Office of Price Administration have had the effect of breaking down sanitary requirements. This is indeed unfortunate. Apparently many of these federal requirements were drawn up by eastern lawyers who did not understand field conditions and who did not realize the detrimental effect that some of their orders would have upon sanitary requirements.

We are hopeful that as soon as peace has been officially declared that many of the new existent undesirable requirements will be withdrawn.

In 1945 the Livestock Sanitary Board issued 701 dairy licenses and 53 milk plant licenses.

MEAT INSPECTION

Official State meat inspection is still being carried on at eight abattoirs. Federal meat inspection is maintained at four abattoirs in Montana.

We strongly recommend to the various municipalities and cities that they institute a system of meat inspection. It would appear that cities that do not have meat inspection become dumping grounds of undesirable meat and meat food products by reason of the fact that such products are not permitted to be shipped into or sold in areas where meat inspection is required.

Meat inspection protects public health, in fact, it may be reasonably stated that future health protection will demand meat inspection.

At a later period of time and in areas where it can be conducted properly meat grading also should be required.

In 1945 the Livestock Sanitary Board issued 60 slaughterhouse licenses.

MONTHLY LETTER

This Department continues to issue a monthly letter on various disease conditions in livestock observed in Montana. This monthly letter is forwarded to each veterinarian in the State.

BACTERIOLOGICAL AND PATHOLOGICAL LABORATORY

We commend the Bacteriological and Pathological laboratory of the Montana Livestock Sanitary Board for their very excellent work. We call your attention to the report of Dr. E. M. Jonesehild and trust that you will observe the wide scope of work that is performed by the Livestock Sanitary Board laboratory.

CHEMICAL LABORATORY

Virgil A. Willson, chemist to the Livestock Sanitary Board is still with the armed forces.

Dr. Ernest C. Stone who was employed by the Livestock Sanitary Board as chemist during Mr. Willson's absence we expect to return from the armed forces sometime in January.

Dr. Stone will be assigned as a district deputy State veterinary surgeon with headquarters at Kalispell.

It is expected that Mr. Willson will return sometime this spring.

During their absences from the chemical laboratory Dr. H. R. Wilkins has performed routine chemical analyses in a most creditable manner.

HONORABLE BOARD OF EXAMINERS

Again we express to the Honorable S. C. Ford, Governor of Montana, the Honorable Sam W. Mitchell, Secretary of State, and to the Honorable R. V. Bottomly, Attorney General, individually and as members of the State Board of Examiners our sincere personal appreciation and the appreciation of this Department for their counsel and the understanding assistance which they have rendered to us.

STOCKGROWERS

The Livestock Sanitary Board corps appreciates the continued outstanding cooperation which the stockgrowers of Montana have rendered this Department.

UNITED STATES BUREAU OF ANIMAL INDUSTRY

To Dr. A. W. Miller, who retired as Chief of the Bureau of Animal Industry, United States Department of Agriculture October 31, 1945, we express our sincere appreciation for the splendid work he has performed for the livestock industry of the United States and the cooperation that he always extended to this Department and the stockgrowers of Montana.

We do not know of a more competent disease-control official than Dr. A. W. Miller. His judgment was sound and his answers always were to the point.

Dr. Miller was located in Montana for a number of years when the Montana

Livestock Sanitary Board and the Bureau of Animal Industry cooperated in the eradication of dourine.

We never worked with a finer men. We shall miss his counsel and his understanding of western range conditions.

To Dr. B. T. Simms, who has been appointed Chief, we extend our congratulations. Dr. Simms was located in the west for a number of years. We have known him for many years and we admire and appreciate his ability and sincerity of purpose.

We again express to Dr. G. W. Cronen, Inspector in Charge of Bureau of Animal Industry operations in Montana and his efficient field corps, our sincere appreciation for their capable and efficient cooperation.

MONTANA LIVESTOCK SANITARY BOARD CORPS

I express my personal appreciation to each member of the Montana Livestock Sanitary Board personnel and bespeak to you my highest commendation for their loyal and efficient service.

VETERINARY SERVICE

Veterinary service is a hard work. It entails long hours and field investigations and post mortems at times under very cold and trying weather conditions.

Our office force is not adequate to take care of our reports and files in a manner in which our reports should be kept. To perform the office work has required many hours of overtime. We trust that this situation now may be remedied by reason of increased appropriation, when office personnel becomes available. At the present time it seems simply impossible to get either adequate office personnel or competent field veterinarians.

Respectfully submitted,

W. J. Butler

W. J. BUTLER
State Veterinary Surgeon
and Executive Officer

REPORT OF THE BACTERIOLOGIST & PATHOLOGIST

December 1, 1944 to November 30, 1945

During the past year ending November 30, 1945, there were 53,212 specimens examined in the laboratory. The material consisted of blood, smears, skin scrapings, exudates, feces, pus, parasites, tissues, milk, cream and water.

The species of animal and bird life represented by these specimens were horses, cattle, sheep, swine, dogs, goats, buffalo, elk, mink, rabbits, guinea pigs, eagle, ducks, prairie chicken, chickens and turkeys.

The following is a classified list of diagnoses made giving the number of positive, negative and suspicious diagnoses made in each case.

		POSITIVE	NEGATIVE	SUSPICIOUS
Abortion, vibrionic	Sheep		1	
Abscesses, B. coli	Cattle	1		
" Corynebacterium ovis	Elk	1		
" Corynebacterium pyogenes	Cattle	2		
" mixed infection	Cattle	3		
" Staphylococcic	Cattle	1		
Actinobacillosis	Cattle	1		
Actinomycosis	Cattle	1		
Anaplasmosis, blood smears	Cattle	1	14	
Anemia	Swine	2		
Ankylosis	Cattle	1		
Anthrax	Cattle		7	
Arthritis, Staphylococcic	Chickens	1		
" "	Turkeys	2		
Asthma	Cattle	1		
Bacillary icterchemoglobinuria	Cattle	2		
Blackleg	Cattle	8	9	
Brucellosis, agglutination test	Cattle	2280	45100	1944
Brucellosis, agglutination test	Goats		59	
Brucellosis, agglutination test	Horses	8		2
Brucella abortus vaccine for viability		2		
Cholera	Swine	1		
Cirrhosis of liver	Swine	1		
Colibacillosis	Chickens	5		
Coryza	Chickens	1		
Cysts, Habronema	Prairie chicken	1		
Encephalomyelitis, neutralization test	Horses		4	
Enteritis	Cattle	1		
Enteritis, mucoid	Rabbits	11		
Enterohepatitis	Turkeys	19		
Enterotoxemia	Sheep	2	1	
Erysipelas, agglutination test	Swine	21	4	
Erysipelas tissues	Swine	2	2	
Favus	Chickens	2		
Fitness for food	Piece of beef		1	
"	Beef liver	1		
"	Goat meat	1		
Gastritis	Cattle	1		
Hepatic coccidiosis	Rabbits	1		
Identification of specimens:				
Cysts from cow		2		
Hypoderma bovis (grub)		1		

		POSITIVE	NEGATIVE	SUSPICIOUS
Infectious anemia	Horses	2	1	
Infectious bronchitis	Chickens	11		
Infectious disease examination	Cattle		6	
"	Chickens		5	
Laryngotracheitis	Chickens	1		
Leptospirosis	Cattle		1	
Leukosis	Chickens	9		
Listerellosis	Sheep		2	
Lunger disease	Sheep	3		
Malignant edema	Cattle	?		
Mange	Cattle		4	
Mange	Swine		3	
Metritis	Cattle	1		
Microfilariasis	Dog		1	
Navel ill	Cattle	1		
Necrobacillosis	Cattle	6		
Nephritis	Cattle	1		
No diagnoses made	Cattle	6		
"	Chickens	18		
"	Mink	1		
"	Sheep	2		
Papilloma	Sheep	1		
Parasites, fecal examination	Buffalo	1		
"	Cattle	2	7	
"	Chickens	1	1	
"	Dogs	7	23	
"	Horses	27	1	
"	Mink		6	
"	Sheep	9	1	
"	Swine	1		
Parasites, intestinal examination				
Ascaris	Chickens	4		
Coccidial oocysts	Cattle	9		
" "	Chickens	26		
" "	Rabbits	5		
Haemonchus contortus	Cattle	1		
Nematodirus	Cattle	1		
Ostertagia	Sheep	4		
Teniasis	Chickens	7		
"	Sheep	1		
Pasteurellosis	Cattle	1	5	
"	Guinea pigs	2		
"	Rabbits	1		
Pediculosis	Cattle	1		
"	Chickens	1		
Pericarditis	Chickens	1		
Peritonitis	Chickens	5		
Perosis	Turkeys	2		
Pneumonia	Cattle	1		
"	Chickens	3		
Poisoning, salt	Chickens	2		
Pullorum disease	Chickens	56	2	
Pulpy kidney disease	Sheep	2		
Rabies	Dogs		1	
Rickets	Chickens	3		
"	Rabbits	1		
Ringworm	Horses	2		
Roup	Chickens	2		

		POSITIVE	NEGATIVE	SUSPICIOUS
Sarcosporidiosis	Ducks	1		
Skin lesions (tuberculosis)	Cattle	2		
Starvation	Cattle	1		
Trauma	Chickens	5		
"	Eagle	1		
"	Rabbits	1		
Trichinosis	Swine		1	
Trichomoniasis	Cattle		2	
Tuberculosis	Cattle	2	2	
"	Chickens	4		
Unsatisfactory specimens	Chickens	8		
"	Blood samples	1		
"	Bovine tissue	2		
"	Milk samples	82		
"	Swine tissue	1		
"	Turkey blood	11		
Vitamin A deficiency	Chickens	3		
" A "	Turkeys	3		
" D "	Chickens	8		
" D "	Turkeys	8		
White muscle disease	Cattle	1		
White scours	Cattle	1		
Bottle for sterility		1		
Milk for flavor test		2		
Cream samples for bacterial count		3		
Cream samples for B. coli determination		1	2	
Milk samples for bacterial count		614		
Milk samples for B. coli determination		164	455	
Milk samples for Br. abortus agglutinins		6	626	
Milk samples for streptococcic determination (plate)		54	883	
" " " " " (smears)		137	240	
Water samples for bacterial count		3		
" " " B. coli		1	2	
Total:		3,781	47,485	1,946

Respectfully submitted,

E. M. Jonesch1ld

E. M. JONESCH1LD
Bacteriologist & Pathologist

REPORT OF THE CHEMIST

SAMPLES FOR POISON ANALYSIS
Stomach contents, tissues, etc.

MATERIAL	ARSENIC	LEAD	STRYCHNINE	NEGATIVE	TOTALS
Stomach contents, tissues, etc.					
Bovine	16	1		61	78
Canine			12	6	18
Caprine				1	1
Equine				3	3
Ovine				2	2
Porcine				1	1
Poultry (chickens)				0	0
TOTAL:	16	1	12	74	103

MISCELLANEOUS SAMPLES FOR POISON ANALYSIS

MATERIAL	ARSENIC	STRYCHNINE	LEAD	NEGATIVE	TOTALS
Sawdust	2				2
Water				7	7
Green powder	1				1
Mine tailings	1		1		2
Oats	2	1		3	6
Plaster				2	2
Salt				2	2
Shavings from poles	2				4
Dead grasshoppers and dirt				1	1
Meat	1	2		3	6
Pancake				1	1
Dirt	1				1
Dirt and fat				1	1
TOTAL:	10	3	1	22	36

MILK AND CREAM SAMPLES

Milk samples official, for solids, sediment and preservatives		624
Milk and cream samples for fat only		68
Milk samples for phosphatase test		104
Indicating proper pasteurization	96	
Indicating improper pasteurization	8	
TOTAL:	104	796

INVESTIGATIONS SYNOPTICALLY ARRANGED
INCLUDING COOPERATIVE WORK
WITH THE
UNITED STATES BUREAU OF ANIMAL INDUSTRY

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HORSES

Brucellosis

Horses tested for brucellosis	8
Reactors	8

Dourine

Number affected	None

Glanders

Number affected	None

Encephalomyelitis

Number horses inspected	35
Cases	12

Miscellaneous Inspections

Number inspected	1,599

Scabies

Number affected	None

Importation Inspections

Horses clinically inspected and mallein tested at destination	None
Reactors	None
Horses clinically inspected at destination	None

Tested at Port of Entry and Inspected

Horses clinically inspected and mallein tested	None
Horses clinically inspected	421
Number diseased	None

Inspections for interstate shipment

Mallein tested	None
Reactors	None
Clinically inspected	17,924
Total horses inspected	19,979

CATTLE

Tuberculosis

Dairy cattle tested	12,088
Reactors (no-lesion cases)	5
Percentage of reactors	.0004
Other cattle tested	10,255
Reactors (3 no-lesion cases)	9
Percentage of reactors	.00087

Accredited Tuberculosis-free Herds

Number cattle tested	1,396
Number reactors	None

Retests of Imported Cattle

60-90 day retests	None

Cattle Tested at Port of Entry

Total	None

Cattle Tested at Destination

Total	None

Tests for Interstate Shipment

Cattle tuberculin tested	2,945
Reactors	None

Total cattle tested for tuberculosis	22,684
Number of reactors (8 no-lesion cases)	14
Percentage of reactors	.005

Scabies

Number inspected for scabies	179,834
Number affected	None

Brucellosis

Number cattle inspected and blood tested	49,324
Positive reactors	2,280
Percentage of positive reactors	.046
Suspicious reactors	1,944
Percentage of suspicious reactors	.039

Miscellaneous Cattle Inspections

Number of inspections	142,190

Mastitis

Number clinically inspected	687
Number affected	200

Cattle Inspected at Port of Entry

Number clinically inspected	46
Diseased	None
Number clinically inspected upon arrival in State	None
Diseased	None

Inspections for Interstate Shipment

Number	98,699
Number diseased	None

SHEEP

Scabies and Miscellaneous Diseases

Number inspected	341,425
Number affected with scabies	None

Importation Inspections

Number sheep inspected and quarantined	93,922
Number dipped and quarantined including 1st & 2nd dippings	None
*Re-inspection of imported sheep	108,759
Number sheep inspected at Port of Entry	4,196

*Includes contact native sheep and one or more re-inspections

Inspections for Interstate Shipment

Number inspected	848,096
Total sheep inspections 1945	1,396,398

GOATS

Number inspected	157
Number diseased (including 59 blood tests for brucellosis)	None

SWINE

Number inspected for various diseases including hog cholera	61,642
Number premises infected with hog cholera	10
Number swine inspected at Port of Entry	22
Number swine inspected for interstate shipment	1,050
Number swine inspected for erysipelas	525
Number diseased	79
Total swine inspections 1945	63,239

POULTRY

Number inspected for tuberculosis and various diseases	37,773

DOGS

Inspected for various diseases	23
Cases of rabies	None
Inspected for interstate shipment	943
Total dogs inspected 1945	966

GAME AND FUR-BEARING ANIMALS

Number inspected for various diseases	2

GRAND TOTALS

Total animals inspected	1,974,206
Fowls inspected	37,773
Total animals and fowls inspected	2,011,979
Miles traveled by district deputies and sheep inspectors	187,347
Miles traveled by resident deputies	22,924
Total miles traveled in 1945:	210,271

IMPORTATION REPORT
MONTANA LIVESTOCK SANITARY BOARD
November 30, 1944 - December 1, 1945

STATE	HC	TEST CHARTS	HORSES HC	HORSES TEST	CATTLE HC	CATTLE TEST	SHEEP	SWINE	DOGS	CATS
Old Mexico	9		2		4,111					
Canada	84	17	512		39	66	3,871			
Arizona	7	2	12		548	20			1	
Arkansas	1	1				35			1	
California	52	16	9		32	1,633	4,135		49	1
Colorado	91	109	128	30	10,493	3,779	4		25	
Idaho	125	27	41	2	2,456	2,421	18,297	28	42	
Illinois	47	22	1			32		2	44	
Indiana	6		7		1			1	2	
Iowa	44	7	22			60		6	39	
Kansas	8	38	1	1		219		1	8	
Kentucky	2								2	
Louisiana		1				120				
Maine	6		5		30					
Michigan	7	5				5	3		4	
Minnesota	73	31	17		40	196	3	10	54	
Missouri	19	6	7	3	138	127	1	1	13	
Nebraska	38	12	13		102	239		2	28	
Nevada	8				1,026				7	
N. Hampshire		1				1				
New Mexico	25	6	18	1	4,555	885		35	1	
New York	2	1				21	13		1	
No. Dakota	99	82	72		1,285	605	1,796	52	44	
Ohio	10	1	2			1	1	2	6	
Oklahoma	1								1	
Oregon	150	94	2	5	231	270	14,634	11	42	4
So. Dakota	44	13	39		1,270	82	8,497	2	10	
Tennessee	9		5						6	
Texas	33	49	9	9	4,621	6,159	12		4	
Utah	25	7	1		85	683	167		15	1
Virginia	1								1	
Washington	255	32	94	20	1,675	138	60,375	5	240	4
Wisconsin	17	16			1	100		1	17	
Wyoming	119	108	150		2,194	2,178	11,353	4	28	
TOTALS:	1,422	704	1169	71	34,933	20,075	123162	163	735	10